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| 09/507,768      | 02/18/2000  | Sergio Lazzarotto    | 4617                | 8618             |

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EXAMINER

LEE, TIMOTHY L

ART UNIT

PAPER NUMBER

2697

DATE MAILED: 06/10/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/507,768

Applicant(s)

LAZZAROTTO ET AL.

Examiner

Timothy Lee

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2697

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 415. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Rostoker et al. (US 6,006,105). Regarding claims 1, 9, 11, 17, 18, 19, 28, 30, 31, and 33, Rostoker et al. discloses a wireless communications device that is able to self-adapt to various operating frequencies and communications protocols so that the device is able to provide communications in several service areas. See Abstract. Looking at Figure 4, it can be seen that the device can receive signals in the 800 MHz/900 MHz range as well as the 1800 MHz/1900 MHz range. The TDMA, CDMA, and GSM protocols can be available in either frequency range depending on the location. See col. 4, lines 4-20. The operating frequency of these transceiver sections is selected by the micro-controller (receiving an output signal from one of a first communication system operating in a first frequency range or a second communication system operating in a second

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frequency range; receiving the output signal at a processor). See also col. 11, lines 33-49. One or more of these transceiver sections can be operable at a particular time. See col. 11, lines 58-61. The interface with circuit portion 138 in Fig. 6 allows circuit 200 to participate in sorting and recognizing various types, formats, and protocols of communication signals which may be received by the device 122; the device is able to self-adapt to a wide variety of high communication formats and protocols (identifying whether the first system operating in the first frequency range or second communication system operation in the second frequency range sent the output signal). See col. 13, lines 28-53. After determining the type of data and the protocol used, the device has adaptation branches 214a and 214b that can process the data, which includes graphics, video imaging, and data transmission of various protocols and standards (implementing the protocol that corresponds to the identified communication system). See col. 13, line 52-col. 14, line 30.

4. Regarding claims 7, 11, 21, and 32 more specifically, the provisions for processing the first and second processes are all contained within the device 22, where the microcontroller determines which adaptation (e.g. GSM vs. CDMA) the device should implement. In this case, if CMDA is considered the “second communication system”, then it has it’s own microcontroller 58 in Fig. 4 (second communication has a microcontroller unit having a first process for detecting and processing the second output signal). Likewise, it has a first process for detecting and processing from a first communication system. The device also has the capability of providing a “second process” for detecting and processing a first output signal, which in this example would be GSM. The two processes can also be characterized as being in different sections. See Fig. 4. The microcontroller is certainly a component of the one of the first

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communication system and the second communication system—without it, there would be no way that the device could communicate with the base station, and thus, no communications would take place.

5. Regarding claim 33 more specifically, the microcontroller must know how to operate in some manner, so it must be reading its instructions from some computer readable medium.

6. Regarding claims 2, 12 and 22, a signal that can carry graphics and video image communication signals can be considered a broadband signal (output signal is one of a baseband signal and a broadband signal). See col. 13, lines 49-62.

7. Regarding claims 3-6, 13-16, and 23-26, as mentioned previously, one of the RF frequency ranges can be 900 MHz and the other can be at 1900 MHz (first communication system operates from about 800 MHz to 1 GHz; second communication system operative from 1.8 GHz to 2.0 GHz).

8. Regarding claims 10 and 29, if the system encounters an unfamiliar protocol, the user can request that the protocol be downloaded from the system. Until that download occurs, the device will not receive data that is not “valid”—if the data is something that the system recognizes, then it will proceed normally (verifying data associated with the output signal is valid; responsive to the data being valid, transmitting the data to a data port that is coupled to the MCU). See col. 31, lines 16-20.

9. Regarding claim 20, the microcontroller interfaces with a microcontroller RAM which acts as memory (MCU has a memory that is configured).

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 8 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rostoker et al. (US 6,006,105) in view of Cheng et al. (US 6,393,008). The rejections of claims 1 and 19 stand in this rejection. Rostoker et al. does not expressly disclose decoding a set of MAC information associated with the output signal. Cheng et al. discloses decoding MAC information in a wireless environment. See col. 2, line 42-col. 3, line 34. It would have been obvious to have been able to read MAC information in the system disclosed by Rostoker et al.. One would have been motivated to do this because there are certain layers that an output must pass through in order to be processed, and the MAC layer is one of them.

12. Claims 33-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rostoker et al. in view of Han (US 5,605,505). Regarding claims 33, 38, 39, 40, 41, 42, 43, 44, 45, and 46, claim 34 is similar to claims 1, 11, 19, and 33 (and the subsequent claims are similar to their dependents), so the rejection of those claims from before also stand in this rejection. Rostoker et al. does not expressly disclose having a first port and a second port for receiving communication information from the devices in the different frequency ranges. Han discloses a system that includes two receiving units that can receive signals from two different input devices (e.g. game controllers) that work on two different frequencies. See col. 2, lines 20-49. It would have been obvious to a person of ordinary skill in the art at the time of the invention to include two

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receiving ports in the receiving system disclosed by Rostoker et al. One would have been motivated to do this because in certain situations, it could be more efficient to have two input/output ports as opposed to having all of the signals go through one receiver and being filtered to the different processing units for the different frequency ranges. In a system that values speed over component efficiency, not sending the signals through the filter could increase the speed of the system.

13. Regarding claim 37, the data port is connected to the processor as shown in Fig. 2 of Han.

14. Regarding claim 35, neither Rostoker et al. nor Han discloses a third input/output port, but it would have been obvious to include a third one. One would have been motivated to do this because a user might have wanted to use a third peripheral or game controller in the system.

15. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rostoker et al. in view of Han in further view of Junod et al. (US 5,854,621). Neither Rostoker et al. nor Han discloses using a wireless keyboard and a wireless mouse. Junod et al. discloses using a wireless mouse and also mentions the possibility of a wireless keyboard. See col. 4, lines 9-30. It would have been obvious to a person of ordinary skill in the art at the time of the invention to use keyboards and mice as the input devices as opposed to controllers. One would have been motivated to do this because if this system were implemented with a computer, a user might desire having a wireless keyboard and mouse as opposed to game controllers.

#### ***Remarks***

16. The previous Office action has been withdrawn, and this Action takes its place. This situation was warranted because a pre-amendment was filed by the Applicant, but it was never entered into the file at the time the Examiner first examined and composed the first Office

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Action. After the Applicant received the first Office Action, the Applicant notified the Examiner, telling him that they had sent a pre-amendment to the Office. The Applicant then faxed in the pre-amendment, and the case was re-examined by the Examiner.

***Conclusion***


17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Rostoker et al. (US 5,793,416), Gillig et al. (US 4989,230), and Tayebi et al. (US 6,373,827) disclose systems that can handle multiple protocol systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy Lee whose telephone number is (703)305-7349. The examiner can normally be reached on M-F, 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (703)305-4789. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9314 for regular communications and (703)872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.

TLL  
May 28, 2003

  
RICKY NGO  
PRIMARY EXAMINER